TURCK multiprox INC

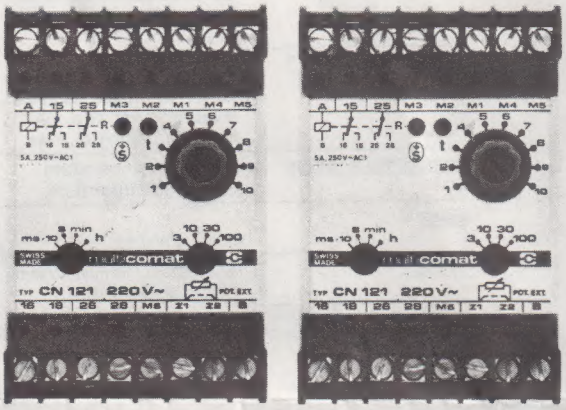
9715 Tenth Ave. No.
Minneapolis, Minn. 55441
Phone: (612) 544-7977 Telex: 29-0261

NEW PRODUCT RELEASE

PROGRAMMABLE TIME-DELAY RELAYS WITH 10 MILLISECOND TO 100 HOUR RANGE

Time-Delay Relay (multiCOMAT) CN 121

CN121



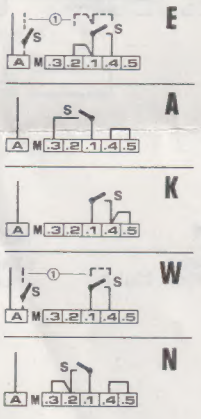
- Molded plastic case with base dimensions of 50mm (1.97") x 75mm (2.95") for snap fastening to 35mm DIN rail or foot mounting.
- Two quick-release terminal blocks permit interchanging timers without disconnecting hard wiring.
- 5 timer-switching functions can be selected by simple jumper connections.
- An inductive proximity switch (three-wire, NPN output) or mechanical switch can be used to initiate timer.
- LED indicators monitor both the time-delay (16 time ranges from 10ms to 100 hrs.) and output relay (DPDT).

TIME RANGES		ms × 10	s	min	h
Switch Position	**3**	10... 30 ms	0,3... 3 s	0,3... 3 min	0,3... 3 h
	10	10... 100 ms	1 ... 10 s	1 ... 10 min	1 ... 10 h
	30	30... 300 ms	3 ... 30 s	3 ... 30 min	3 ... 30 h
	100	100...1000 ms	10 ...100 s	10 ...100 min	10 ...100 h

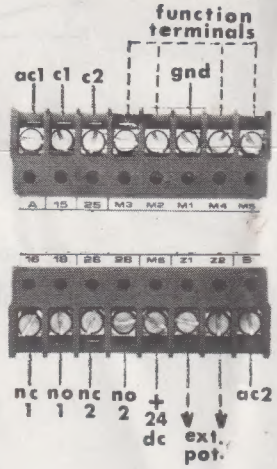
When using an inductive proximity switch (3-wire, NPN output) connect positive lead to M6, negative lead to M1 and output lead to M2, M3 or M4 depending on function desired.

FUNCTIONS	Diagram	Description	FUNCTION
E On delay Delay on operate	t, S, R	After closing of control contact S, output relay R energizes according to set time lag and remains so until S opens.	→ E
A Off delay Delay on release with aux. voltage	t, S, R	After closing of control contact S, output relay R energizes immediately and releases according to set time lag after opening of control contact.	→ A
K One shot leading edge Pulse shortening/lengthening	t, S, R	After closing of control contact S (pulse or constant contact), output relay R energizes immediately and releases after end of set time delay.	→ K
W One shot leading edge Pulse limitation	t, S, R	After closing of control contact S (constant contact), output relay R energizes immediately and falls back again after time expiry or opening of S.	→ W
N One shot trailing edge	t, S, R	Relay electronics are set by closing of control contact S. After opening of S, output relay R energizes for the set time delay.	→ N

Function wiring



CONNECTIONS



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SPECIFICATIONS

TECHNICAL DATA	Standard Types	at 25°C const. T
Time-delay accuracy	Repeat accuracy	0,1 % or 1 ms
	Voltage stability	0,5 %/10 % Δ
	Temperature stability	0,05 %/°C Δ
Drive	Triggering time	7...10 ms
() with line control	Reset time	5...10 (50) ms
	Contact load 1–4	10...15 mA
	Duty cycle ED	100 %
Output contacts	Contacts	Dpdt
	Contact material	AgCdO-90/10 [2]
	Mechanical life	2×10^7 operations
	at 5A, 220 V AC [1]	8×10^4 operations
Breaking capacity [1]	With AC load	1100 VA
	With DC load	250 W
	Switching voltage, max.	250 VAC
	Switching current, max.	5 A
Temperature range	Ambient temperature	−20...+60° C
	Storage temperature	−25...+80° C
Case		
	Case material	ABS
Weight	AC Types (with mains transf.)	approx. 300 g
	ADC and DC Types	approx. 200 g

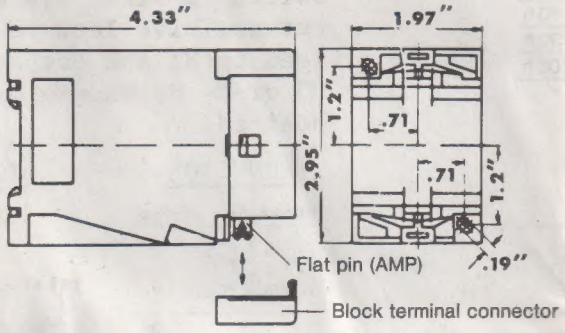
1) These values are for resistive load or inductive load with spark damping.
2) Other contact material, e.g. silver, 10 µ gold-plated (also twin contacts) on request.

VOLTAGES, Tolerances, Current Consumption

	AC 50-60 Hz		DC max. residual ripple 10 %		AC–DC		
	% Δ	mA	% Δ	mA	% Δ		mA
V	from to	max	from to	max	with AC operat. from to	with DC operat. from to	max
240	○ -15 +10	17					
220	● -15 +10	18					
127	○						
115	○						
110	● -15 +10	35					
60	○		○	50			
48	○		○		● -20 +15	-20 +20	60
42	○		○		○ -20 +20	-20 +20	60
36	○		○		○ -20 +20	-20 +20	60
24	○		○		● -15 +20	-15 +20	60
12	○						

● Stock type ○ available at short notice (against order)
Other voltages on request

DIMENSIONS



MODEL

CN 121
110 VAC
220 VAC
24 VAC/DC
48 VAC/DC

EXAMPLE OF ORDER	Text	Type
For 1 programmable, multi-range time-delay relay 0–100 h, voltage 220 V AC	1 Time-Delay Relay multiCOMAT	CN 121/220 V AC

TMI
PR-13

5-15-78